AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of measuring the amount of 25-hydroxy vitamin D and/or 1α,25-dihydroxy vitamin D in a sample using a competitive protein binding assay, comprising measuring displacement of a vitamin D derivative of formula (I) from a vitamin D binding protein by 25-hydroxy_vitamin D or lα,25-dihydroxy vitamin D,

wherein a displacement efficiency of approximately 1 is obtained by using a vitamin D derivative of formula (I):

wherein:

R represents a 25-hydroxylated side-group of vitamin D₂ or of vitamin D₃;

Y represents hydrogen or hydroxy;

and correlating the measurement of displacement of the vitamin D derivative of formula (I) from the vitamin D binding protein in the sample to the measurement of displacement of the vitamin D derivative of formula (I) from the vitamin D binding protein using a known quantity of the vitamin D derivative of formula (I) to determine the amount of 25-hydroxy vitamin D and $1\alpha,25$ -dihydroxy vitamin D in the sample.

2 (Canceled)

3. (**Original**) The method of claim 1, wherein the method is sandwich immunoassay, selected from the group consisting of immuno radiometric assay, IEMA/EIA, immuno luminometric assay and immunofluorometric assay.

4 (Currently amended) A kit for detection of 25-hydroxy vitamin D or 1α, 25- dihydroxy vitamin D or both in a sample on by by a competitive protein binding assay, wherein displacement of a vitamin D derivative of the formula (I) from a vitamin D binding protein is measured and the vitamin D derivative displaces 25-hydroxy vitamin D or lα,25-dihydroxy vitamin D from the vitamin D binding protein, comprising a standardized quantity of a solid vitamin D derivative of formula (I) or a standardized solution of a vitamin D derivative of formula (I):

wherein:

R represents a 25-hydroxylated side-group of vitamin D₂ or of vitamin D₃;

Y represents hydrogen or hydroxy.

5-6. (Cancelled)

- 7. (**Original**) The kit of claim 4 comprising a solid phase selected from the group consisting of a microtitration plate, another solid carrier, a microparticle, a polymeric material, and a cellulose.
- 8. (Original) The kit of claim 7, in which the solid phase is a microparticle comprising agarose.

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9. (Original) The kit of claim 7, in which the solid phase is a magnetic microparticle.

10. (Canceled)

DRN/II

- 11. (**Previously Presented**) The method of claim 1, wherein said competitive protein binding assay is selected from the group consisting of an enzyme immunoassay, an enzyme-linked immunosorbent assay, a radio immunoassay, an immunoradiometric assay, a luminescence assay, a fluorescence immunoassay and an immunofluorometric assay.
- 12. (Previously Presented) The method of claim 1 wherein Y is hydroxy.
- 13. (Previously Presented) The kit of claim 4 wherein Y is hydroxy.
- 14. (Currently amended) The method of claim 1, wherein the amount of lα,25-dihydroxy vitamin D is measured and 25-hydroxy vitamin D is removed from the sample before performing the competitive protein binding assay.
- 15. (Currently **amended**) The method of claim 1, in which an antibody that specifically binds 1α,25-dihydroxy vitamin D is used <u>as the vitamin D binding protein</u> in the competitive protein binding assay.
- 16. (New) A method of measuring the amount of lα,25-dihydroxy vitamin D in human serum using a competitive protein binding assay, comprising:
 - i) separating 25-hydroxy vitamin D from the $l\alpha,25$ -dihydroxy vitamin by binding $l\alpha,25$ -hydroxy vitamin D in a sample of the human serum to a material that specifically binds $l\alpha,25$ -hydroxy vitamin D and eluting $l\alpha,25$ -dihydroxy vitamin D from said material to provide a measurement sample,
 - ii) measuring the displacement of a vitamin D derivative of formula (I) from an antibody that specifically binds $l\alpha,25$ -dihydroxy vitamin D,
 - wherein a displacement efficiency of approximately 1 is obtained by using a vitamin D derivative of formula

wherein:

R represents a 25-hvdroxylated side-group of vitamin D_2 or of vitamin D_3 , and Y represents hydroxy; and

- iii) correlating the measurement of displacement of the vitamin D derivative of formula (I) from said antibody to the measurement of displacement of the $l\alpha,25$ -dihydroxy vitamin D from the antibody using a known quantity of the vitamin D derivative of formula (I) to determine the amount of $l\alpha,25$ -dihydroxy vitamin D in the sample.
- 17. (New) The kit of claim 4, comprising an antibody that specifically binds lα,25-dihydroxy vitamin D as a binding protein.
- 18. (New) The kit of claim 4, further comprising a column material that can bind lα,25-dihydroxy vitamin D for separation of 25-hydroxy vitamin D from lα,25-dihydroxy vitamin D.